ABSTRACT

A method, computer program product and system for monitoring and locating an object using secure communications without relying on GPS. A monitoring device may activate a monitored unit (unit monitored by monitoring device) by transmitting a seed of an algorithm and a time synchronization to the monitored unit. The seed and time synchronization may be used in conjunction with an algorithm, e.g., frequency hopping table, stored in both the monitoring device and the monitored unit, to allow both the monitoring device and the monitored unit to communicate with one another at a uniquely synchronized time and frequency thereby making it more difficult for a third party to locate the monitored unit. An alert may be generated when the monitored unit is located beyond a predetermined zone. The monitored unit may be located by activating a directional antenna in conjunction with a digital compass on the monitoring device.